UNITED STATES OF AMERICA

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DEPARTMENT OF THE INTERIOR

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MINERALS MANAGEMENT SERVICE

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OCS RENEWABLE ENERGY AND

ALTERNATIVE USE PROGRAMMATIC EIS

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PUBLIC SCOPING MEETING

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TUESDAY

MAY 23, 2006

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The Group met at the Marriott Trenton at Lafayette Yard, One West Lafayette Street, Trenton, New Jersey.

MEMBERS PRESENT:

PATRICK DAUGHERTY

LISA JACKSON, Commissioner, NJ DEP

PETER MANDELSTAM

SASHE ANNETE

TOM FOTE

JEFF TITTEL

STEVEN R. KOPF

TIM DILLINGHAM

KEITH M. RELLA

BRUCE FREEMAN

MICHAEL KUJAWA

RAYMOND J. KENARD

JOHN WEBER

MICHAEL MERCURIO

CHRIS WISSEMANN

BOB LINK

PHIL WHITAKER

JIM SHERMAN

C O N T E N T S

PAGE

P-R-O-C-E-E-D-I-N-G-S

(6:50 p.m.)

MR. DAUGHERTY: Patrick Daugherty.

FACILITATOR: Patrick, if you wouldn't mind going to the podium?

MR. DAUGHERTY: Did you say I had to spell my name?

FACILITATOR: No, you don't. We've got your name on the card.

MR. DAUGHERTY: Do I have to go there?

FACILITATOR: Well, we prefer it so everybody can hear. If you'd like, I can get you a handheld mic. Would you prefer that?

MR. DAUGHERTY: No I think I'm all right. Can you hear me? Patrick Daugherty, 11 Cedar Crest Drive in Neptune, New Jersey, on the New Jersey seashore. It's probably better described as nimbi land. You know what a nimbi is, of course?

I'll keep it to about a minute. Despite the fact that the Asbury Park Press had an editorial, two feature stories, and a full-page feature story on tonight's event, I'm probably the only guy to come over here from the Jersey Shore who would probably be most affected by what has been described here tonight, which I think is extraordinary, and also what the

board or panel had -- the Governor's Blue Ribbon Panel conducted, but I would think that there should be a way of reaching out more to the general public in your efforts.

I think most of the people here are professional people. I would doubt that there's many people here from the general public, and the general public, I think, need to learn more about the approach that you have described here, which I think is extraordinary.

If perhaps your itinerary has not been completed yet, I could accommodate you over on the New Jersey seashore with an extraordinary auditorium, which is not mine, and you may be preempting some of the things that the Blue Ribbon Panel have already covered, but I think this topic is so vital that there could be much added to the whole acceptance of alternative wind turbine energy on the part of the general public if the MMS, I think you call yourselves, were to pursue having a meeting such as you had here tonight over on the New Jersey seashore.

FACILITATOR: Thank you. I understand we do have an elected official with us tonight, Lisa Jackson, Commissioner of the New Jersey Department of Environmental Protection.

MS. JACKSON: I'm not elected, but my boss was, so I'll take that. Thank you. My name is Lisa Jackson. I'm Commissioner of the New Jersey Department of Environmental Protection, and I am submitting these comments for the record on behalf of the State of New Jersey and we do intend to submit some written comments later.

The economics of energy today may promote an explosion in the development of renewable energy. This development holds great promise for the environment, but to achieve this promise we must be vigilant in considering the full range of potential consequences from alternative energy proposals on the outer continental shelf.

New Jersey supports offshore alternative energy as long as it does not unreasonably affect our natural resources or our tourism economy. For New Jersey, the shore is an environmental treasure that unites us, and appreciation of the shore is a core part of what it means to be from New Jersey.

Shore-related tourism is also an economic engine contributing over $22 billion annually to our state's economy. As you define the range of issues to be considered for offshore energy proposals, I urge you to undertake a comprehensive review of potential

consequences. The risks to our economy and this natural treasure are too great to do anything less.

New Jersey has identified a number of specific issues that must be included in an EIS if it is to be comprehensive. These concerns are informed by the extensive work recently completed by a panel appointed by the governor to consider proposals for offshore wind-generation in state waters.

These concerns are not meant to be obstacles to the development of offshore energy. The governor's panel stated plainly in its findings that New Jersey faces a serious and growing energy crisis that cannot be ignored.

New Jersey must be a leader in developing clean renewable sources of energy, and New Jersey must face its energy problems with bold action on multiple fronts. The panel also found that based on information available today, offshore wind turbine technology offers a range of potential benefits and possible drawbacks.

Too much remains unknown to characterize the appropriateness of offshore wind development for New Jersey's coastal waters. With the guidelines you established, you can help fill the void regarding the impact of offshore energy facilities.

Among New Jersey's concerns as laid out by the wind panel is the lack of baseline studies for a variety of species potentially affected by the construction off of-shore facilities. These species include birds, fish, marine mammals, and reptiles, some of which are endangered or threatened.

Essential habitat, behavioral responses to habitat alterations, and/or migration patterns will help inform decisions regarding proper placement of offshore facilities and should be included in an EIS.

In assessing the viability of offshore energy generation, an EIS should also include information about the cumulative impact of siting decisions and require an alternatives analysis to provide a clear understanding of the cost, both economic and non-economic, and benefits of an individual project.

The limited contribution of an individual project may make sense to meet our energy needs, but may also be achieved more economically and in a more environmentally sound manner through alternative means, conservation, energy efficiency, and other demand side strategies for example.

An alternatives analysis can help identify the true environmental cost and benefits of a project,

and should be a requirement. The socioeconomic impact of proposed development must also weigh heavy on the decision of where these offshore facilities should be sited.

The shore is a great economic engine for New Jersey. A comprehensive review must include an assessment of how a proposal will affect transportation and recreational and commercial fishing. The mapping of navigation routes and prime fishing locations is critical to ensure siting decisions do not adversely affect the economy.

In addition, costal areas tend to be heavily developed and expensive property. The siting of offshore facilities may affect property values and potentially raise environmental justice issues, and so these possible effects must be explored as well.

Perhaps most difficult of these socioeconomic issues is the aesthetic impact of siting. Tourism at the shore supports enumerable small businesses and provides tourists with a relatively affordable opportunity for a family vacation.

There has been speculation as to how people might react to an offshore facility, but no hard data has been developed. We need to expand our

knowledge if we are to make a responsible decision.

I recognize that many of these concerns are on your radar screen and have been discussed in white papers you have issued. I raise them today because they are priority concerns for us in New Jersey.

I also wish to repeat key findings of our state's wind panel. New Jersey recognizes that we face a serious and growing energy crisis that cannot be ignored, and New Jersey must be a leader in developing clean, renewable sources of energy.

The panel even went so far as to recommend a federal/state, public/private partnership to establish a pilot project to explore the use of large-scale offshore wind. Our reliance on fossil fuels has threatened our environment, our economy, and our national security.

We must pursue alternatives, but we must do it carefully. In considering proposals to generate energy from alternative sources off the outer continental shelf, let us not be blind to the potential for unintended consequences.

Let us require a comprehensive EIS for such projects, and then proceed secure in the knowledge that we have fully considered the potential

problems of such proposals, the benefits, and the alternatives. Thank you.

FACILITATOR: Thank you. Next speaker, Peter Mandelstam.

MR. MANDELSTAM: Thank you very much. I'd like to first echo Commissioner Lisa Jackson's comments. I'm a developer both on-land and offshore wind projects, and I echo your sentiments. It's very important that responsible developers such as my company, Bluewater, look closely at all of the issues concerning offshore wind.

My company, Arkady Wind Power, recently developed 135 megawatts in Montana, the first project in the State of Montana. Those megawatts are now spinning, and I expect an additional 45 megawatts will be installed this year.

I've strongly advocated offshore wind since 1999 in my capacity as chairman of the group in New York State called Wind Power New York. I compete in the worldwide competition for the Long Island offshore wind project. It was a very arduous, long process preceded by two and a half years of efforts on the ground by me, stakeholder outreach and education working with community groups, environmental groups, local elected officials.

There was then the competition. My company put together a 2,200-page proposal that LIPA actually read and even commented on. We had a year of follow-up questions, interviews, 92 separate additional requests for information. It was quite a process.

In the end, as you know, FPO won the bid and Bluewater remains highly interested in developing a project in New Jersey and elsewhere. But again, to echo the Commissioner's sentiments, I think it's very important that a developer such as myself and Bluewater do it in a proper way.

I want to talk about the specific issue of MMS. I note the comment in the Blue Ribbon Panel, "While MMS develops its programmatic EIS, there exists a de facto moratorium on wind turbine development and waters beyond three nautical miles off shore, waters under federal jurisdiction." Page 12.

The report comments that MMS may not process, of course they may, but may not any new offshore wind sites before the end of 2007, or at another point in the report they say early 2008 at the earliest.

This, I believe, is worry some. I'm not advocating a curtailing of reviews. I'm advocating

concurrent reviews. As Commissioner Jackson said, it's a time of rising electricity costs, there was just a rate increase averaging 14 percent in New Jersey.

The essence of the MMS efforts and the intent of a company such as Bluewater Wind is, I think, in concert with the Blue Ribbon Panel recommendation to ensure a full and fair environmental impact statement is done for a proposed project.

As a private developer who bid the Long Island project and someone who is interested in coming to New Jersey, I too want a detailed scientifically valid EIS to be written in order for the government agencies to review, and I believe after public comment, scientific studies, and other debate that I believe that an offshore wind farm can be approved off New Jersey.

MMS now has jurisdiction over offshore in federal waters. If MMS needs additional time to develop regulations and prepare a programmatic EIS, there is no policy reason why a private developer such as Bluewater cannot go forward with a comprehensive site-specific environmental review that will cover all of the generic EIS issues in greater detail.

MMS' stated desire is to identify areas of

scoping concern and "generic impacts" that have been studied in other areas such as Cape Wind and LIPA and will be studied in greater site-specific detail in an EIS for a project.

I see my time is up. Let me just say that there's no scientific policy or regulatory reason why new offshore wind applications should not be reviewed as soon as a private developer is ready to undertake and pay for them. Thank you very much.

FACILITATOR: Thank you. Next speaker, Tom Fote. Okay. We'll put him in the queue. Sashe Annete.

MS. ANNETE: Good evening. I'm Sashe Annete. I'm an environmental media strategist. I also have a production company that is focusing at the moment on producing concerts and festivals. We're doing two in August in New Jersey this summer to raise awareness and funds for renewable energy and affiliated organizations.

I'm not a scientist or a policymaker. I am a member of the U.S. Green Building Council, New Jersey Chapter, and a proud resident of Monmouth County, so I have obvious interest in how this policy develops and in the potential future of offshore wind farms, not only in New Jersey but throughout the

northeast and ultimately our world.

The northeast corridor is probably one of the greatest energy strains on our grid. We are vulnerable to rising prices, vulnerable to shortages, and blackouts, and vulnerable to terrorism.

Wind technology has been used on our planet since ancient times. There is no reason that we should not be fully taking advantage of the technology that is now available to implement this natural, clean renewable source of energy.

If you look at the widespread use of renewable energy, particularly wind power in Europe, we should be shamed as a nation and as a world leader that they are so far ahead of us in implementing wide-scale wind systems for example.

They have obviously overcome the obstacles of cost, aesthetic, and environmental impact. We must follow their lead. There is no reason that we can't be leapfrogging off of their progress. They have a similar environment and a similar ecology to the United States, and they have obviously surmounted the hurdles that we are now facing.

So the big question is why are they so far ahead of us? I suggest that it is a matter of consciousness. Consciousness of a people filters

through to the consciousness of a government and vice versa. They have faced higher energy costs for many years, as well as pollution and environmental concerns.

We seem to have forgotten the crises of the 1970s, and we are facing much worse if we don't make some serious long-term changes. There is no choice. So I challenge all involved parties on the research, technology, and policy levels to get on the same page and fast.

We need a new paradigm to implement this technology and push it through in a way that has not been done before. You must be creative in the way that you choose to move down this road and expedite this process, to take advantage of the research and the solutions that have already been found, for example, by our friends in Europe.

I think that there are some ironic advantages that might not have been considered. Tourism may actually increase when people become aware of this and realize what the benefit is to our environment and to our economy.

Granted, Europe has a different aesthetic sensibility, but they obviously have overcome that particular challenge. Environmental impacts, how many

birds are killed by an oil tanker running ashore or sucked into jet plane engines?

There is also the multiple use advantage, telecommunication towers, helicopter pads, homeland security uses, and the artificial reef systems that may actually provide fish farms offshore, which would also be an advantage to New Jersey's economy.

Wind is wind, wind, wind. There are no advantages to reliance on fossil fuels. Yes, it's expensive, but once in place they are low maintenance both in cost and in manpower.

So I would like to thank MMS for this opportunity, and I would like to applaud the New Jersey Clean Energy Program and the governor's Blue Ribbon Panel for the work that they have done so far.

No one is talking about doing this irresponsibly. It is our great responsibility to get this done and soon. Thank you.

FACILITATOR: Thank you. Let's see, has Tom Fote returned?

MR. FOTE: Tom Fote from Jersey Coast Angler's Association. I wear a lot of hats. I sit on the habitat committee for Atlantic Station Refisheries Commission, I listen to a lot of reports, I get a lot of information.

I was surprised that I had to read on Sunday about this hearing in the newspaper and that I hadn't received the notification through the mail or through the Internet or by email.

Since I was listed on the governor's task force, it might have been interesting to look at the list and send out from the people on the list at least email us a list of names that could've been corresponded to.

I basically try to get out to the membership of Jersey Coast at the same time -- I'm not standing close enough to the microphone -- at the same time to get the information out. Jersey Coast will be submitting written comments.

Bruce Freeman, who just retired from the Division of Fish and Wildlife, I brought his as another volunteer since I'm a volunteer. He'll be helping us put some of this information together.

Turbine scamming, one of the things we have to do -- what you should be doing is looking at risk analysis, and we do fish advisories. We look at whether it's safer to eat a piece of fish with mercury in it than eat a chicken with hormones in eat to beef with Mad Cow Disease.

When we look at -- excuse me. When we

look at the alternatives to energy, we should be looking at the same thing, whether wind power basically causes any fish damage, whether turbines does, or were the wave action.

That should be part of the criteria because my main interest is what it does to the fish, to the people that depend on fishing for their living, and to the environment out there.

We look at that $22 billion worth of tourism industry, a billion and a half is recreational fishing. Two and a half is probably boating. About $500 million to $600 million is commercial fishing. Now that's a big part of that tourism dollars, and we basically -- people -- a lot of jobs there.

We need to basically look at that as part of the process. I am one of those -- the person who first got up here said from the shore, that's where I live is Toms River. The governor's Blue Ribbon Panel made sure they had hearings at the coast because that's the people that's going to be involved the most.

I was disappointed that it had to be anywhere in Trenton, and also the times -- 6:30 is not convenient to people that work for a living that do this as a volunteer to show up to basically testify.

Basically it's -- to try get to Trenton you're living up -- you're working in North Jersey, it takes you an hour and a half to get here. It should be no earlier than 7:00 even sign-in, unless you're going to have somebody during the day.

I mean, usually with -- I've turned ones when they did sand mining they were done during the day and during the night. If you're going to have it, you might as well have a two-parter. You're bringing all the experts in, you're bringing the people that are listening to our testimony, so when you come around on the second round hopefully that's what you will do.

You'll basically have an afternoon hearing for the professionals, the people that get paid to go to hearings, and for the public that wants to come at night and basically express their concerns.

Again, we're not against wind energy, we're not against renewable energy. How can I be against renewable energy when I'm looking at mercury in my fish, PCBs and all the other problems that come about?

We also are looking at global warming. I live on the bay and we're not careful, I'm going to be living on oceanfront property because the barrier

island in front of me is going to be covered with water, and we need to do something about that.

I won't take any more of your time right now. Thank you.

FACILITATOR: Thank you. Jeff Tittel.

MR. TITTEL: Jeff Tittel, Director, New Jersey Sierra Club. I'm here representing our 24,000 members in New Jersey in this process, and the club nationally is engaged, as well.

The Sierra Club believes that the biggest threat to our oceans, to our ecosystems, and to our planet is global warming, and we are very concerned that at the rate we're going with carbon dioxide and greenhouse gases there won't be a planet that's going to be habitable in 50 to 100 years from now.

We strongly believe we have to look very carefully at offshore wind and other alternative energy sources as a way to help mitigate and deal with this terrible future that could be facing us with the changes in climate, meaning the changes in species that'll be living in the oceans, and changes in climate, meaning the types of birds and migratory patterns that we already see being interrupted.

But we also want to make sure that it's done right and it's done in a way that will help

protect the oceans and protect our future as well, but we do believe that this is a process that has to go forward.

A couple of issues that I wanted to raise when I was looking at the charts, you talked about socioeconomic impacts, you should also be looking at socioeconomic benefits, as well as environmental benefits that could be coming from this project or different projects off the coast to look at the differences that would happen in our future if our energy needs keep growing if we don't do conservation and we don't look at alternative energy sources, but to look at the amount of pollution and greenhouse gases that will be impacting us as well and mercury and NOx and SOx and everything else.

I know that may be a little bit tough with the Bush Administration at times, but I think it's one of the things that has to be looked at when we're trying to balance the need to go forward with wind and how we do it.

We also believe that you should not stand in the way of New Jersey trying to do a pilot project so that we can get some real data to assess the impacts on the coast of New Jersey that we strongly believe that this type of project needs to go forward

so that we can get some of the data that may be missing instead of making assumptions.

We should also be looking more towards Europe and seeing what's happening there. But we strongly believe that this needs to go forward and that we will be actively participating in this process. Thank you.

FACILITATOR: Thank you. Steven Kopf.

MR. KOPF: Hi. Good evening. My name is Steven Kopf. I represent Ocean Power Technologies based just right up the road in Pennington, New Jersey.

We are the world's leading wave energy development company. We've got buoys operating in New Jersey, Hawaii. We have just been selected for the UK Wave hub. We also have joint ventures with Total and Iberdrola to build pilot programs in France and Spain respectively.

However, this evening I am here to represent OREC. OREC is a 501(c) trade association with members and affiliates from the U.S., U.K, Ireland, and Canada. These members are a group of committed ocean and offshore wind technology developers, consultants, investors, and lawyers who are at the forefront of bringing clean, renewable

offshore energy technology to the U.S.

OREC is technology neutral meaning that we support all types of development. What I really want to do tonight is focus on OREC's view as specifically related to the MMS scoping.

Number 1, breadth. We want to make sure that the emerging technologies are treated equally in the EIS. We want to make sure that wave and current are addressed on equal basis as wind.

There's a lot of energy around offshore wind, but we want to make sure that the other technologies get addressed as well because early stage investment -- our firm, as well as a number of other global firms have been very successful in the last year of attracting early stage investment.

If you study the marketplaces, a tremendous amount of investment going right now into ocean energy, and we don't want to curtail that. If the investors see that there's not that equal basis, then they're going to run.

Specifically, I think the concern there is making sure that the rules that do go into effect allow for pilot scale programs. Right now in the ocean energy excluding wind, a big project right now is five or ten megawatts.

So we need a process that is streamlined and that will permit these small-scale demonstration programs, which build the investor confidence, which allows us to hit the hockey stick scale ups. We need that confidence and that investor base and anything we do in these rule makings that prevent the small scale pilot programs from occurring is just -- it's just going to impede the whole development process.

So it's something that we really want to make sure that the MMS pays attention to is that there's a big difference now if you're Florida Power and Light trying to develop a couple hundred-megawatt project and you're an early stage C capital company trying to launch a two or a five-megawatt project.

I think in closing I want to also -- you know, time is of the essence. Time is of the essence because this is as much about energy and environment -- it's about economic development. We don't want to concede this industry to the Europeans.

The time is now to do this. We are working it hard, and we can show the world that the U.S. is the place to see these projects by streamline rule making. Thank you very much, and I applaud your efforts.

FACILITATOR: Thank you. Next speaker,

Tim Dillingham, American Littoral Society.

MR. DILLINGHAM: Thank you. It's always interesting when the podium is set this way to address you all. Tim Dillingham. I'm with the American Littoral Society. We're a national NGO involved with coastal and marine protection.

I also served as a member of the governor's Blue Ribbon Panel on offshore wind development in New Jersey. I guess the context of my comments tonight, we have submitted comments to you in response to the advance notice for rule making, and we will submit further written comments to give you much more detail in response to the work that you put out already.

I guess the broader context, though, is very much, as the Commissioner stated earlier on, that when New Jersey spent 15 months examining both the state of the knowledge about these facilities, about the potential impacts, the potential benefits, the result was a very, very cautious report.

It was not an endorsement. In fact, the panel, the majority of the panel chose to not endorse the development of offshore wind, and I think by extension other alternative energy technologies because of the absence of information that would be

necessary to really truly assess the pros and cons and the benefits and the consequences of industrial structures being placed and developed in the ocean.

I think that going through the review of the literature, both the European experiences, which are on a much, much different scale than we're potentially talking about in the United States and so are of limited value in terms of the empirical evidence that they've generated, that we really want to make sure that your EIS work gives equal weight to the standard that the Commissioner articulated that the development of alternative sources of energy generation needs to be weighed out against the other public benefits and uses that are already coming from the ocean, whether those are commercial fishing, recreational fishing, tourism, the continued existence of marine mammals, and other resources.

I would say a couple things. One, in reading your documents, I think the generic list that you're coming up with in terms of identifying what the areas of your investigation ought to be in terms of the environmental impacts are generally right.

I think people understand what the universe of potential impacts are, whether those are impacts on the living resources by the structures in

the water or the operation of the turbines themselves or by the other technologies that are being talked about, the displacement of current uses of commercial fishing from large fields, those are all generally -- I think you're on the right track in that aspect of your scoping.

There are other issues that were submitted in our comments on the advance notice that allowed in writing, but I think generally you're there. The problem is that there is, to the best of my knowledge, a real lack of information about those resources which you are setting out to try to assess the impact on.

There is not good information on marine mammals on their migratory routes, on their breeding areas, on the distribution and concentration of commercial fishing. The Blue Ribbon Panel tried to do that. We consulted with the National Marine Fishery Service, with NOAA, with others.

So you really do need to put that information together and it really raises a very serious concern about the time line that you've established in doing this EIS and its validity in the absence of that information.

Secondly I think the EIS has to be conducted on a regional scale, and you have to assess

this from full build out. I think if you try to do this in a generic approach and then look at project by project, you are not going to be able to assess the impacts adequately.

I think that raises very serious questions about the usefulness of the EIS and kind of perpetuates the ongoing problems where we cumulatively fail to assess what a series of these kind of facilities up and down the North Atlantic, the Mid Atlantic or other places.

I don't see how you can do that within the time frame given the current state of knowledge that's out there. Thank you.

FACILITATOR: Thank you. Next speaker, Keith M. Rella, Clean Ocean Action.

MR. RELLA: Thank you. I'm Keith Rella, policy advocate for Clean Ocean Action. Clean Ocean Action is a regional broad-based coalition of over 150 conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups with a mission to improve the degraded water quality of the marine waters off New Jersey and the New York coast.

I thank you for holding the hearings, the series of hearings, and for the opportunity to testify

here. According to the Minerals Management Services notice, the programmatic EIS will assess generic impacts from development, operations, and decommissioning of renewable energy or alternate use facilities and identify key issues and mitigation measures that should be considered by subsequent site-specific reviews.

We're here tonight primarily to listen, but would like to offer some basic comments. Our recent experience with New Jersey's Blue Ribbon Panel on development of wind turbine facilities and coastal waters exposed the scarcity and deficiency of biological and ecological baseline data on the outer continental shelf.

In the absence of such data it's scientifically impossible to determine ecological impacts of offshore renewable energy and alternate use facilities, therefore, we are skeptical that any programmatic EIS conducted at this time will adequately address the environmental impacts associated with activities described in the proposed scope before a programmatic EIS can be developed and extensive research agenda must be undertaken and completed to address these significant deficiencies.

Then ocean action will submit additional

comments further detailing the necessary research agenda and other related issues. Thank you again for the opportunity.

FACILITATOR: Thank you. Next speaker, Bruce Freeman, Jersey Coast Angler's Association.

MR. FREEMAN: Thank you. I'm speaking on behalf of Jersey Coast Angler's Association and add my comments to what Tom Fote had indicated. I'm also speaking as a chair of the science and research committee of that organization, which is located in Toms River, New Jersey.

First it would be certainly more helpful if this hearing were held along the shore where these impacts are going to occur. To some, certainly it may be convenient in this area, but for those of us who live and work along the shore, this is very inconvenient.

I take up the offer the first speaker had given. There's plenty of places that would be no cost to the federal agency to have those hearings.

Jersey Coast has an open mind in this issue. Obviously finding ways to produce power with minimal environmental impacts is something very appealing. However, there are many questions which remain unanswered and need to be known.

One of the first questions I have is why are all these proposals 3.1 to 4 miles offshore? Why aren't some of them 2 to 2.9 miles? It seems very strange, and I never did get a clear answer as to why these proposals are not submitted for state waters. They're always just outside of state waters.

The other question I have is how does the application of the Federal Coastal Zone Act relate to this wind energy, and I suspect you'll answer those questions in your Environmental Impact Statement, but that's certainly one you should look at.

We also need to answer the question of the impact of the towers, as well as the transmission lines both during construction, as well as the maintenance of these lines. How will they affect fish migration particularly in vertebrates such as lobster migrations?

Will these animals walk along the bottom? Are there electromagnetic fields that will disrupt these migrations, including cancer crabs and many other invertebrates? These questions certainly have not been answered.

Will the placement of these towers displace historical fishing areas where both recreational and commercial fisherman now use? How

will the siting of these be determined, and how will they be determined relative to the present use of those areas by others?

One other point is the safety issue. Will these wind fields, if they are established, become sanctuaries because of either safety or navigational problems where they'll simply be made off limits to the public? How is that question going to be answered?

Is it within the purview of the Mineral Management Service, or is this an issue dealing with the Coast Guard or Homeland Security? Those are some of the questions. We will submit further comments in our written testimony. Thank you.

FACILITATOR: Thank you. Next speaker, Michael Kujawa, Win Power -- Winenergy Power, excuse me.

MR. KUJAWA: My name is Michael Kujawa. I'm with Winergy Power. I don't envy your task because there's a great emphasis to get through the definition or rules to develop this massive offshore energy resource we have -- that we have that's not in somebody else's territory.

I would like to recommend as far as the scoping goes that we give consideration to quantifying

the beneficial impact of offshore reenables for wind, waves, currents. There are defined formulas for calculating the reductions in mortality from reduced power plant demitions now, folks seeing particulant matter that can also be equated to birds for one thing, birds breathe the same air.

I would also like to recommend that we use the knowledge that's gained from a series of demonstration projects to develop GEIS to reduce a repetitive gathering of the same type of information as we find out what benefits, where we can put things, what we know, where the mammal paths are.

We know which way the fish are traveling and where their spawning grounds are, so once these knowledge bases are established that in future permitting this doesn't have to be done anymore, we can just make references to previously-gained knowledge okay? That's it. Thank you.

FACILITATOR: Thank you. Next speaker, Raymond J. Kenard, American Wind and Power and Hydrogen.

MR. KENARD: Thank you. Two of the preceding speakers made two very important points that I would like to focus on. One of them is what has been done in Europe relative to wind farms and the

other one is that one was focused on benefits, not just the detriments of the actions that you're planning.

In addition to the tremendous amount of wind turbine activity in Europe, there's been a tremendous amount of hydrogen activity in Europe also. As early as 2001, the Munich Airport had a hydrogen facility, a hydrogen infrastructure facility and five hydrogen fuel buses.

Today or over the last three years there have been something like 33 buses that have been operating in nine different cities in Europe. All these buses have been hydrogen fueled. I don't think anybody in this room can name a hydrogen fueled bus or have seen a hydrogen-fueled bus.

Wind turbine electricity can be converted easily to hydrogen through a process named electrolysis. Because of the focus in Europe on hydrogen as a solution to the environmental problems of the world, to global warming, to energy security, they've been able to develop the electrolysis technology beyond some of the earlier, smaller facilities that have been built.

Today there are large scale electrolysis facilities being considered with technology by Norse

Hydro in Europe and by Hydrogenix, which is a Canadian company. There actually happen to be seven different facilities in the United States now being considered for large scale hydrogen electrolysis facilities.

Obviously none of them are associated with offshore wind, but most of them are associated with wind resources in the Great Plains states where there is comparable wind resources comparable to what is offshore.

The other issue about considering the benefits, the amount of energy that's offshore of Long Island is estimated to be 7,700 megawatts of potential electricity. That is more than twice the amount of electricity which if converted to hydrogen would support the entire mass transit facility of the greater New York-New Jersey area.

That mass transit facility contributes about 1.7 million tons of pollutants to the atmosphere every year. Anything that's done to reduce that concentration of pollutants is very, very advantageous.

In the information I'm going to be leaving with the service here is some preliminary information on the Norse Hydro electrolysis large scale technology where they've been successful in reducing the size

materially, where they've been successful in increasing the efficiency, and are prepared to offer this technology as of early 2007.

There is a radical evolution of technology going on elsewhere in the world that Jersey should take part in. The feasibility of offshore wind has been demonstrated by the Europeans. It is something that should come to New Jersey's attention now.

FACILITATOR: Thank you. Next speaker, James Sherman, American Wind Power Hydrogen, LLC.

[Off-mic response.]

FACILITATOR: Okay. Next speaker, John Weber, Surfrider Foundation.

MR. WEBER: John Weber with the Surfrider Foundation. With all due respect to our first speaker, I live in Bradley Beach, which is nestled between Neptune, New Jersey, and the Atlantic Ocean.

Surfrider Foundation's a nonprofit organization that's dedicated to the protection and preservation of the world's oceans, waves, and beaches for all to enjoy. It was founded in 1984, now supports 50 -- has 50,000 members across the United States, 65 chapters, and 5 international affiliates.

Like many environmental groups, the Surfrider Foundation's eager to move the United States

towards a renewable energy future, and we see wind as an important part of that renewable energy future, but on the other hand, like some other environmental groups, we feel like not all the questions have been answered with respect to birds, marine mammals, fish, commercial fishing, and the list.

But as a recreational user group of surfers, we have a specific concern that has yet to be answered. Our organization feels that a breaking wave is a natural resource. Just like a clean mountain stream full of trout is a natural resource, it has a recreational benefit and there's an economic benefit associated with that.

As such, it shouldn't be diminished by physical means that would alter or destroy it, and it shouldn't be made useless by chemical or biological means, so the question that we pose to New Jersey's Blue Ribbon Panel, twice with respect to breaking waves is this will an array of offshore wind facilities create a shoaling effect around the base of these structures thereby making the water more shallow around the base of these structures and diminish the incoming wave energy.

I bet you -- I hadn't thought of this one yet, or I don't know if this has come up, but -- so

it's our basic question. We've asked it, it hasn't been answered, and we're going to reserve judgment on any site-specific proposal until we can get that question answered.

The other thing is the -- I'll give you a preview of what you're going to get tomorrow out in Long Island. There are Surfrider chapters in the region that feel really strongly that protected parks such as Jones Beach and Fire Island National Seashore are -- there's a strong sentiment that the unobstructed view provided by these parks is part of the park experience.

In fact, in Fire Island National Seashore, part of that area is a national wilderness area. It's the only one in New York State. It's one of the few on the East Coast, and a lot of people feel that the parks should be handed down to the next generation in the same condition that they were enjoyed by this generation and past generations.

The parks should be handed down the same way they were conceived by their -- well, when they were conceived. So that's a little bit of what you're going to get tomorrow night. As an organization we're not against wind and renewables.

If it were -- I know the technology, if it

exists or if it's close to coming online and these facilities can be moved further offshore, the question I just raised about shoaling wouldn't matter, and the concern with the parks and the view shed, that's not going to matter either.

So if that technology is close, it might make sense to wait until that is online. Regardless of whether wind is developed offshore or not, the federal government should make energy conservation a priority and enhance programs that make energy conservation affordable to average citizens and affordable to small businesses.

I know in the first slide presentation it said MMS is -- one of MMS' goals is to increase and balance energy sources. There's no mention about conservation.

New Jersey, we have a clean energy program. Obviously, we're putting solar panels on rooftops all over the state. I know there's a difference between the economics and solar and wind and wind is better, but the difference is if you put a solar panel on a rooftop there's no public hearings, there's no EIS, there's no NEPA requirements, there's no anything like that.

So it just brings us closer to that energy

independent future. Thanks very much.

FACILITATOR: Thank you. Next speaker, Dena Motolla, New Jersey Public Interest Research Group.

[Off-mic response.]

FACILITATOR: She had to leave? Okay. Then we'll move onto Michael Mercurio, Island Wind, Inc.

MR. MERCURIO: Ladies and gentlemen of the Minerals Management Service panel, my name is Michael Mercurio of Island Wind Group. I am a member of a number of renewable energy associations and environmental groups.

I live on a barrier island in New Jersey, which is threatened by a number of different environmental problems. Thank you for this time to express my environmental concerns regarding offshore renewable energy development in the United States.

America today is stronger than ever before. Our adversaries have not abandoned their ambitions or dangers. They have not diminished at all. Our vigilance cannot be relaxed, but now we have the scientific and economic strength to do whatever must be done for the preservation and the promotion of national energy security and our environment.

We in this country, in this generation, are by destiny rather than by choice the watchmaker of the world environment. We ask therefore that we may be worthy of our power and responsibility that we may exercise our strengths with wisdom and restraint, and that we may achieve in our time and for all time the ancient vision of peace on Earth with harmony to nature.

That must always be our goal and the righteousness of our cause must always be our underlying strength. I would like to address a few environmental concerns that I have regarding the ocean and the planet we all live on for we all coexist with the birds and the animals and breathing the same air, drinking the same water, and live on the same land.

That is why there is a need to expedite this permitting process. Our ocean levels are rising with ozone layers, CO_2s, nitrous gases, and high intensity storms. It is clear our environment is changing, and we are approaching a carbon-constrained world.

My experience in living on a barrier island is that I can see these things happening firsthand. A lot of people don't see them for what is happening on a yearly basis to our coastlines. I have

provided you with some pictures, which I will give to you as proof of this evidence of what is happening. This country should immediately allow existing offshore projects to go forward such as Cape Wind and LIPA as part of Phase 1 study and a giant step forward to the beginning of solving a number of problems this country has.

We can study numerous types of hypothetical environmental concerns and problems, but the facts are we all live together with the birds, the animals, and the fish. Harmony must be achieved with quality of air, water, and the atmosphere of the planet.

This panel should be concerned with dealing with Phase 2 studies of how to build in the ocean in deeper water. I therefore call on this panel to be lenient to the permitting of this new emerging technology so that it may be developed in a proper manner.

Reforms are needed to address market barriers to renewable and energy sources and streamline uniform planning procedures and integrated least cost network planning.

Fair environmental and transparent pricing for leasers in order to achieve success of the project

is needed. Siting of renewable energy systems should be site specific to the permitting process and not stringent.

One fact that people bring up to wind turbines is they kill birds, which offshore wind will reduce any chance of happening. A simple fact is that the further out in the ocean you go, the fewer birds are present, except for migratory birds pass from land to sea and then land again.

Most endangered species forage and live near the coastline and inland, not out in the ocean. Offshore wind is different than land-based units. The ocean acts as a physical barrier. In fact, they are not land constrained in their deployment.

Wind turbines and therefore offshore wind is totally different than a land-based unit. MS should adopt avian permitting process for radar for two years and a one-year visual siting of radar.

I have been a sports fisherman for over 50 years, and I have seen large amounts of fish populations depleted most rapidly in the past 25 years to over-fishing by commercial drudging fishing.

Offshore wind has to do all kinds of reports to substrate of the ocean floor to see what effect it will have. Drag netters rake and destroy

the bottom of the ocean at all time. I would like to see commercial fishing in these areas as a measure of compensation and conservation to not be allowed in these areas.

Royalties -- there should be a flow group and liaison group of offshore wind grouping the wind people, developers, and the fishing industry. I have brought you some reports from Europe that has been written on matters concerning offshore wind and how they are dealing with the permitting and the review for your review to study.

I lived on Long Beach Island for 55 years and my family loves the island and I would like to see my children and grandchildren enjoy it for years to come. At present rate, the way things are, my children will not be able to live there anymore. Thank you.

FACILITATOR: Thank you. Next speaker, Chris Wissemann, Winergy Power.

MR. WISSEMANN: Good evening. I'm Chris Wissemann, Winergy Power. Thanks for the prelude. I'm clearly highly biased towards seeing offshore wind implemented as soon as possible.

I'm also highly biased towards seeing my kids enjoy the same sort of environment and all the n

natural resources that were available to me as a kid growing up.

If anybody has any doubt about the urgency of going forward with all forms or renewables really as soon as possible, I've got to urge you to read a book that I just finished today, The Weather Makers. It'll set the record clear on where we're going as a civilization.

Two specific issues to MMS, things that we may have overlooked in some of our earlier comments. As a developer that's seriously looking at implementing large scale offshore projects, I'd like to make sure that in the EIS they cable issues specifically are addressed.

Cable landings for everybody here that's looking at any of these projects are going to be the same. There's differences, whether it's rock, sand, mud, but I think we should look at the cable landings as something the EIS covers very specifically so that it doesn't need to be done again and again and again by every developer, specifically high voltage AC power.

I'd also like to make sure that the purview of MMS also really includes the cable and the interconnect. There are a lot of agencies that need

to be coordinated, FERC, various ISO agencies, clearly city states, everywhere where cable lands, and to make sure that MMS purview doesn't end once you hit state waters, to make sure that carries through on every element of a project so they ultimately could be implemented successfully. Thank you.

FACILITATOR: Thank you. Next speaker, Bob Link, Winergy Power.

MR. LINK: Thank you very much. My name is Bob Link from Winergy Power. I'm going to face you because you're the people I'm speaking to and they've probably heard me before.

Just so that you know I'm color blind so when you hold those things up -- this will only take a few moments. One, I've made my living off the coastline most of my life with fish. The world is losing 10,461 pounds of fish every minute of every day according to the last study.

So I personally don't want to do anything that's going to affect the habitat of the fish. When MMS puts their scoping information together, if they could consider two things that I think would be appropriate for all developers: if you -- you're going to need baseline studies, obviously, be it avian, be it turtles, be it fish.

Don't front load them. One year should be appropriate and then monitor them as the project gets built to see what the impacts are. Two, to avoid segmentation or piece mealing. Allow a project to be phased in. If we're going to build a project, build a project -- it's 180 turbines let's say -- so phase it, 60, 60, and 60 over a prescribed period of time so that piece mealing or segmentation does not occur.

Three, most, most, most importantly, keep in mind that the wind farms that were done over in Europe, Horns Rev, 80 turbines, soon to be 160; Nysted, 72 turbines, soon to be 144, those are demonstration projects still. They are not commercial projects.

They were set up as demonstration projects, even though they're quite large. Thank you, and you didn't have to put up a card.

FACILITATOR: No, you've still got two minutes and twelve seconds. Okay, we've reached that part of the program where we've entered all of the registered speakers. Is there anybody else who'd like to make a comment?

Yes, sir. Please go to the podium and state your name. Make sure the court reporter gets the correct spelling.

MR. WHITAKER: I'm Phil Whitaker. I'm with the University of Delaware, although I'm speaking strictly for myself at this moment.

I've been doing some research for the past three years interviewing people from Massachusetts to Delaware on their attitudes towards offshore wind power. I've spoken to probably in-depth interviews lasting between 30 minutes and 2 hours, closer to 45-50 people in that region, that New Jersey, Massachusetts, and Delaware specifically.

I'd just like to say that I think a voice that you're not hearing here, a voice that isn't get out very much, is that once people understand wind power, its place in our energy system and our energy mix and the potential of it offshore offers, I just haven't found anyone who's against it.

The view issue and the environmental concerns that we hear, such as the Surfriders have brought up as one example, these are all issues that are concerning to many people, but they're not issues that they want to see derail progress on developing alternative energy.

I think that it's very important that you understand people want this, a lot of people really, really want this. They want to see something happen,

and speaking strictly for myself, I really hope that some community somewhere brings development of these turbines in close to shore, because I really want to be able to see them.

I like them. I think they're a valuable addition aesthetically to a shoreline. I can see another point of view exists, but at least a couple places I hope we can get them in close to shore. Thank you.

FACILITATOR: Thank you. Anybody -- yes.

MS. ANNETE: Sashe Annete again. I want to thank all of you for the quality of comments and intelligence and passion in the room. I would like to thank MMS very much for allowing this opportunity, which I find a rare one for the public to actually have an active role in policy development and we will hold you to it.

I think this is an incredible start. It gives me hope and optimism, and I agree with some of the comments that were made about timing. I think that we could probably go on all night talking about this, and I think that these sessions need to continue in more depth with more opportunity for us to respond to each other.

Perhaps you could consider expanding the

structure of these public hearings or at least setting up a further forum that we might be able to do that. Again, on all sides, your concerns and policy and development -- I emphasize creativity.

There is a way for all sides to come together and to utilize the advantage of technology and beat the clock that is ticking mercilessly against us. I liken it to MRIs, high contrast and high resolution MRIs. It's the equivalent of having that machine and saying, "No, no, no. We can't do that test on you, so you will die of that disease because we cannot diagnose it and treat it in time."

So I would like to leave you with something a little bit more positive than that dark example, but it's the truth. The technology is there, and we have built it so let's do it. Thank you.

MR. FOTE: Tom Fote again. Bruce told me I wasn't clear before when I was talking about turbines, so I want to make sure you understood what I was talking about.

I was talking about the underwater turbines because I know there's a problem with vital plankton the way it basically destroys fish and everything else, the eggs that are basically in the water column, so that's what I was talking about.

I was not talking about the above-ground turbines, so I just want to make that clear. So when we do the risk assessment there, I need to see what the risk assessment is with the underwater turbines, with the above-the-water turbines, and those types, and again, those are the economic costs especially to the environment.

So I have serious concerns about the under water, not the wave energy. I think that basically will actually provide habitat or provide structure for the fish to hide under, but I guess the underwater turbines, especially with the East River, there's a lot of that are real skeptical about what's going in on the East River and shouldn't have been put in there in the first place because of all the eggs and everything else that floats down there and they're going to get beat to death. Thank you.

MR. SHERMAN: Good evening, James Sherman from American Wind Power and Hydrogen. Listening to all the comments tonight, I just have one comment for the panel. I would suggest that while I know this is a generic EIS and there have been many people in the audience who have advocated that all technologies be considered at the same time, my concern is the concern of others in the room that we get on with this.

This should be treated like a Manhattan Project and not a scientific study that goes on for five or ten years. So if there's a way in doing the generic EIS to perhaps segment out the offshore wind above the water so that that part can be streamlined or fast tracked while some of the other technologies that are much further off in terms of their development, and I don't know what those are, but certainly the offshore wind based on the European experience is ready to go.

It should be, in my opinion, the goal of the Materials Management to fast track that part, separate it if necessary so that we can bring this energy resource online as soon as possible. That may mean stripping out some of the other things.

We're doing a generic EIS just for above the water line wind energy and leave some of the other things for a separate, generic EIS so that the offshore wind market can come into existence sooner than later. Thank you.

FACILITATOR: Thank you. Anyone else?

MR. MERCURIO: I'd just like to add one other thing as far as the fish --

FACILITATOR: Could you just say your name again for the --

MR. MERCURIO: Mike Mercurio from Island Wind.

FACILITATOR: Thank you.

MR. MERCURIO: I'd like to say one other thing about the compensations for fishing on offshore wind. We have a unique opportunity here to create underneath these reef systems, which New Jersey's been very active in creating.

We can also create, if we can ever get Congress to give some of the royalties from renewable energies to feed stock in these area as an added benefit to create a reef system in these areas, which has been actually the goal of the Horns Rev to limit the fishing in the area to enhance the aquatic life.

I am all for recreational fishing. Recreational fishing around an offshore wind site can produce savings on gasoline to fishermen. Instead of going out 70 miles, we can place these turbines in the right place of the reef systems on the continental shelf in 90 to 120 feet of water where you have temperature differentials where you're fin fish come in in order to feed them.

It's a very unique opportunity, and we should take advantage of it also to increase our environment. Thank you.

FACILITATOR: Will the panel take any questions at this point in time?

[Off-mic response]

FACILITATOR: Perhaps after the meeting you can talk one on one with panel members.

[Off-mic response]

FACILITATOR: Okay. If you'd like to make a scoping statement, please go to the podium.

MR. DILLINGHAM: Tim Dillingham, American Littoral Society again. This is, I guess, partly a process question, and that is listening to the comments there's discussion of generic EIS's, programmatic EIS's, there's recommendations for site-specific or project-specific EIS's.

Your website is not very clear in terms of the scope of those investigations and what this work will turn out in terms of how much detail, how much framing. There was a suggestion of extending MMS' jurisdiction into state waters to control the cable landings, that type of thing.

So I guess part of my question is, is there a place that you all can refer us to that details that out more in terms of how far you plan on going in the context of a programmatic EIS, which is what I understand this exercise to be, and how that is

differentiated from a generic EIS. I looked through your website. I could not find that guidance.

The second thought I had just goes back to the energy issue and the relationship to energy demand, and that is will -- I presume that you're going to this EIS for the North Atlantic planning area because you've got maps on your website that had the multiple planning areas. Is that the scope what you're going to do this work on?

Is it going to be specific to the conditions and the circumstances from New Jersey up into New England, which is what I thought I saw the planning area to be defined as?

Okay, well if that is indeed the case, then I guess my comment on the alternatives analysis is that the promise that wind energy, renewable energy holds that we heard people articulate tonight is its ability to offset or to diminish our reliance on fossil fuels.

I think there's some question as to how that actually happens, whether or not this is simply another generation approach that feeds into an ever-increasing curve of demand or whether or not it can be somehow linked back to actually doing reductions.

I know there's an argument made that it

displaces it based upon the cost, its ability to be fed into the grid, but my question then becomes -- or my suggestion is that you need to analyze that aspect of it in your alternatives analysis because there are indeed opportunities through energy efficiency, through other conservation approaches that the Commissioner talked about.

In New Jersey, the work has been done in support of the renewable portfolio standards identified. There's nearly 5,000 megawatts of potential capacity available through conservation.

The question becomes in weighing out the cost and benefits in this process, what the role? What's the mix? I mean clearly the developers here want you to open a market that will allow them to pursue that, allow them to sell this technology, sell electricity into the grid.

I have a separate question of whether or not that's in the best interest of the public given the potential impacts that need to be explored to other public resources.

[Off-mic discussion]

FACILITATOR: Yes, sir.

[Off-mic response]

FACILITATOR: Could you state your name

please? State your name.

[Off-mic response]

FACILITATOR: Any other scoping comments? Okay.

(Whereupon, the above-entitled meeting was concluded at 8:04 p.m.)